

**Notice of Allowability****Application No.**

09/903,189

**Examiner**

Mark Kopec

**Applicant(s)**

NIU ET AL.

**Art Unit**

1751

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amend filed 12/8/03 and Int. Summ. of 3/3/04.
2. ☒ The allowed claim(s) is/are 29-44.
3. ☒ The drawings filed on 24 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Mark Kopec  
Primary Examiner  
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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

**Cancel** claims 1-28 and 45-55.

In claim 29, lines 6-7, delete "and wherein said composite has a bulk resistivity of less than about 10 ohm-cm".

Authorization for this examiner's amendment was given in a telephone interview with Mr. Albert Chen on 3/3/04.

The following is an examiner's statement of reasons for allowance:

Jadamus discloses multilayer plastic compositions having electrically conductive inner layer. The inner layer comprises thermoplastic molding composition containing graphite fibrils (Abstract). The reference specifically describes PVDF polymers/copolymers and the instantly claimed carbon nanotubes (Col 4, lines 43-64; Col 6, lines 25-31). The graphite fibrils are present from 1 to 30 wt% (Col 4, lines 65-68; examples).

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Nahass discloses high strength conductive polymers. The polymer compositions comprise the instantly claimed conductive carbon nanotubes (1-60 wt%) dispersed in a polymeric matrix material (Abstract; Col 3, lines 24-31; Col 7, lines 25-35). The reference specifically teaches PVDF polymers/copolymers as suitable matrix materials (Col 6, lines 5-10).

The prior art, however, does not disclose or fairly suggest the instantly claimed composition(s) requiring a mixture of at least two substances selected from the group consisting of polyvinylidene fluoride, copolymer of polyvinylidene fluoride and another monomer, and another polymer in combination with the claimed carbon nanotubes.

Newly cited US2002/0161101A1 discloses halogen containing polymer nanocomposite compositions. The reference does not disclose or suggest the polymer mixture as claimed.

JP 14-070938 discloses piezoelectric damping material(s). PVDF mixtures may be utilized as matrix materials (page 7). The reference is not available as prior art.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mark Kopec  
Primary Examiner  
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MK  
March 4, 2004

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